

REMARKS

In the September 30, 2003 Office Action, the Examiner noted that claims 1-9 were pending in the application; required a more descriptive title; rejected claims 1-5 and 7-9 under 35 U.S.C. § 102(b); rejected claim 9 under 35 U.S.C. § 103; and objected to claim 6 as dependent upon a rejected base claim. In rejecting the claims, U.S. Patent 5,357,519 to Martin et al. (Reference A) and U.S. Patent 5,440,697 to Boegel et al. (Reference C) were cited. Claims 1-9 remain in the case. The Examiner's rejections are traversed below.

The Invention

The present invention is directed to a device driver apparatus which simulates communication with an I/O device. The apparatus is used with a pseudo I/O (PIO) process that simulates the I/O device. The apparatus can queue commands from the pseudo I/O process, as described at page 12, lines 11-15 which describe the message flow illustrated in Fig. 3. Furthermore, as illustrated at the bottom of Fig. 6 and Figs. 12-15E, the apparatus notifies the pseudo I/O process of the receipt of data asynchronously, i.e., without waiting for a response signal. In addition, the apparatus is able to operate using a SCSI protocol or a protocol that encapsulates SCSI information without conforming to the SCSI protocol (see Figs. 10A and 10B as described at page 28, lines 4-22).

The Prior Art

U.S. Patent 5,357,519 to Martin et al.

The Martin '519 patent is directed to a diagnostic system which, as illustrated in Figs. 1-6, is a handheld device with a plurality of connectors and a keypad. As illustrated in Fig. 8, a peripheral port pack 160 and ROM packs 140, 150 may be connected to provide additional connections and programs for testing (see column 4, line 6 to column 7, line 34). A SCSI connector 660 (Figs. 6 and 10) is provided on the peripheral port pack. Although the peripheral port pack includes software controllable SCSI termination circuitry 1010 (see column 12, lines 16-68), the SCSI interface 940 is located in the base unit (see Fig. 9 and column 10, lines 26-39).

U.S. Patent 5,440,697 to Boegel et al.

The Boegel et al. patent is directed to an on-board diagnostic sub-system for a SCSI interface that is able to simulate a fault-free or faulty device.

New Title

In item 1 on page 2 of the Office Action, the Examiner required a new title that is more clearly indicative of the invention to which the claims are directed. The title has been amended as suggested by the Examiner.

Rejections under 35 U.S.C. § 102

In item 3 on pages 2-4 of the Office Action, claims 1-5 and 7-9 were rejected under 35 U.S.C. § 102(b) as anticipated by Martin '519. Claim 1 has been amended to recite "performing a queuing process when receiving a plurality of commands from the pseudo I/O process" (claim 1, last two lines). Nothing has been cited or found in Martin '519 teaching or suggesting a diagnostic apparatus that can queue commands from an I/O process. Since claims 2-5 and 7-9 depend from claim 1, it is submitted that claims 1-5 and 7-9 patentably distinguish over Martin '519.

In addition, claims 2, 7 and 9 have been amended to more clearly recite a protocol that is an alternative to a SCSI protocol. Nothing has been cited or found in Martin '519 teaching or suggesting a device driver which has the capability of handling "an encapsulation protocol consisting of a protocol that encapsulates SCSI information but not consisting of the SCSI protocol" (e.g., claim 2, lines 2-3). Therefore, it is submitted that claims 2, 7 and 9 further patentably distinguish over Martin '519 for this additional reason.

Furthermore, claim 5 has been amended to recite that "said driver notifies asynchronously the pseudo I/O process that the data has been received" (claim 5, lines 11-12). As discussed above, this means that there is no waiting for a reply from the pseudo I/O process. Nothing has been cited or found in Martin '519 teaching or suggesting asynchronous notification. Therefore, it is submitted that claim 5 further patentably distinguishes over Martin '519 for this additional reason.

Rejections under 35 U.S.C. § 103

In item 5 of pages 4-5 of the Office Action, claim 9 was rejected under 35 U.S.C. § 103(a) as unpatentable over Martin '519 in view of Boegel et al. Nothing was cited or has been found in Boegel et al. suggesting "a queuing process when receiving a plurality of commands from the pseudo I/O process" (claim 1, last line). As discussed above, Martin '519 also lacks any suggestion of such a process. Since claim 9 depends from claim 1, it is submitted that claim 9 patentably distinguishes over Martin '519 in view of Boegel et al. for the reasons discussed above with respect to claim 1.

In addition, claim 9 depends from claim 5 which, as noted above, recites that "said driver notifies asynchronously the pseudo I/O process that the data has been received" (claim 5, lines 11-12) and claim 9 recites the capability of handling "an encapsulation protocol consisting of a protocol that encapsulates SCSI information but not consisting of the SCSI protocol" (claim 9, lines 3-5). As discussed above, neither of these limitations are taught or suggested by Martin '519 and nothing has been cited or found in Boegel et al. relevant to these limitations. Therefore, it is submitted that claim 9 further patentably distinguishes over the combination of Martin '519 and Boegel et al. for the additional reasons discussed above with respect to claims 5 and 9.

Other Comments

The specification has been amended to include a description of Fig. 10B. The paragraphs that were changed, although following a discussion of both Figs. 10A and 10B, were directed to what was illustrated in Fig. 10A. As amended, the paragraphs apply to Fig. 10B, as well as Fig. 10A. It is submitted that the changes to the specification would be obvious to one of ordinary skill in the art from viewing Fig. 10B and the remainder of the specification as filed. Therefore, it is submitted that no "new matter" has been added.

Summary

It is submitted that the references cited by the Examiner, taken individually or in combination, do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1-9 are in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 12/30/03

By: Richard A. Gollhofer
Richard A. Gollhofer
Registration No. 31,106

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501

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on 12/30/2003
STAAS & HALSEY Richard A. Gollhofer
By: 12/30/03
Date: 12/30/03